



## San Diego: Green City, Blue Sea

**W**hen the City of San Diego needed a new headquarters for its Environmental Services Department in 1994, it saw a golden opportunity to lead by example by renovating a 3-story, 73,000 square foot building with an emphasis on energy efficiency and environmental sensitivity. Built in 1981, the Ridgehaven Building had been vacant for 3 years by the time the City purchased it for \$3 million and converted it into a model of resource efficiency for the community.

### GETTING NOTICED, GETTING RESULTS

The Ridgehaven Green Building Demonstration Project was the first building to receive the ENERGY STAR® Label for Buildings. The project symbolizes a common goal of civic leaders and building owners across the City — to save money on energy costs and contribute to a cleaner community.

The building underwent a total overhaul: mechanical, electrical, building envelope, and plumbing systems were upgraded; indoor air quality was monitored and improved; recycled materials were used; and design, operation and maintenance were planned with high resource efficiency and low environmental impact as guiding lights. With a 60 percent decrease in annual energy use in 1996, a projected savings of \$800,000 over 10 years, and an energy use target of 9 kWh/sq. ft., a lot of people are singing the building's praises.

### ALL OARS IN THE WATER

As the Ridgehaven Building is on the cutting edge of building technology, San Diego is on the cutting edge of resourceful energy use. San Diego is pulling together national and local resources to build a more energy-efficient city.

The City's Rebuild America partnership has plans to retrofit four City facilities — the World Trade Center, the Central Library, the Crabtree Building, and Pump Station #2. They have also begun



preliminary energy audits on 20 City buildings targeted for energy improvements; to date, 891,000 square feet of floor space have been audited. Additionally 90% of the 1,800 public housing units in San Diego have implemented energy efficiency improvements.

San Diego draws on expertise from many sources - its municipal utility (San Diego Gas & Electric), its universities, high-tech firms, the California Public Utility Commission (which awarded the City \$400,000 to use for energy efficiency projects) and the ESCO OnSite Energy - to effectively plan and implement its projects. The City has put together an action plan with goals to foster an environmental conservation ethic, significantly

## Partnership Facts:

### TARGETED BUILDINGS:

Four downtown San Diego buildings and facilities: the World Trade Center, the Crabtree Building, the Central Public Library, and Pump Station #2

Over the next ten years, the Ridgehaven Building will prevent an estimated 3,530 tons of carbon dioxide, 10 tons of sulfur dioxide, and nine tons of nitrogen oxides from being released into the atmosphere.

### SQUARE FOOTAGE AFFECTED:

320,500 sq. ft. in commercial and public buildings

### ESTIMATED ENERGY SAVINGS:

558,889 kWh/year

### ENVIRONMENTAL BENEFITS:

211 tons of carbon kept out of the atmosphere

### NEW AND NOTABLE:

First Community in the nation to receive the ENERGY STAR® Label for Buildings in recognition of the Ridgehaven Green Building's energy-efficient performance. Overall resource-efficient Green Building Standards are being applied to the city facilities-totaling over 4.4 million sq. ft.

### COMPLETION DATE:

2000

### TO LEARN MORE ABOUT THE CITY OF SAN DIEGO REBUILD AMERICA PARTNERSHIP:

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reduce energy consumption, and encourage a transition to the use of renewable energy sources.

### EXPANDING BEYOND BUILDINGS

The positive results demonstrated by the Ridgehaven Building and Rebuild America projects in San Diego have encouraged other entities to expand their scope of energy efficiency efforts. The City has instituted a Green Building Policy for construction and renovation of City facilities, which currently total 4.4 million square feet. The water and wastewater treatment facilities will get efficient motors and management. The City will use advanced technology to save \$500,000 annually through LED traffic light retrofits, and dual fuel standards have been set for the City's transportation fleet.

### ENERGY CHAMPIONS SHOW THE WAY

Many San Diego community leaders have lent their support to energy efficiency initiatives, including Mayor Susan Golding, the City Council, and officials from the City's Department of Environmental Services, who are influential advocates of intelligent energy use. These leaders recognize the need to consolidate local resources to ensure that environmental and energy efforts are well coordinated. There are many examples of local support: In addition to its efforts as a Rebuild America partner, San Diego Gas & Electric cooperates with the University of California-San Diego to train commercial building managers in energy efficiency principles. The

City also participates in the Urban Main Street Pilot/Citywide Main Street Program - a pilot partnership between the California Main Street and the National Trust Main Street programs.

### PARTNERSHIP POISED FOR OPPORTUNITY

As a rapidly growing city, San Diego faces challenges in population growth, housing, dwindling resources, and overcrowded, aging schools. Fortunately the City is now eligible for state and local funds from *Proposition 1A* for new construction and renovation of K-12 schools.

Several downtown redevelopment projects - potential energy efficiency projects - are funded and underway: the Lindbergh Air Field, the San Diego Convention Center expansion, the North Bay Revitalization and Ballpark, and the New Main Library Project. The Naval Training Center is planning adaptive reuse of several historic buildings once ownership is transferred to the City.

Ridgehaven is the City's signature building, the first of many to provide its occupants with a more livable environment through green building design. The building won awards after being in the top 25% nationwide in energy-efficient performance. With its ever-greening cityscape, San Diego is sure to guide other cities to a stronger, cleaner energy future.



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